

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20054**

Telecommunications Relay Services            )  
And Speech-to-Speech Services for         )  
Individuals with Hearing and Speech         )  
Disabilities                                        )

CG Docket No. 03-123

**REPLY COMMENTS OF AT&T INC.**

AT&T Inc., on behalf of its telephone companies, hereby replies to the refresh comments filed in the foregoing docket.

Commenters filed extensive comments detailing their proposals for number assignment and portability, an IP-to-Telephone number database, E911 implementation, and consumer protection. While there was a great deal of common ground, there were many differences which could at first blush make it difficult for the Commission to determine what action is most appropriate to ensure functional equivalency for video relay service (“VRS”) and IP Relay users. AT&T specifically urges the Commission, in reviewing the record, to consider the following key principles in making those decisions: (1) VRS and IP Relay users should have access to NANP numbers, just like their hearing counterparts, and should be able to obtain such numbers from their chosen relay provider, (2) all VRS providers should have direct access to centrally stored IP addresses, and (3) key numbering decisions must be made before E911 can be implemented for VRS and IP Relay providers. AT&T addresses these key principles below and briefly responds to specific consumer issues raised in the record.

- 1. The Commission should ensure that all VRS and IP Relay users can use NANP numbers to receive calls, and can obtain such numbers from their designated relay provider.**

The Commission's obvious goal here is to ensure functional equivalency for VRS and IP Relay users. To that end, the Commission asked whether it should adopt proxy numbers that could be directly dialed by hearing individuals to contact VRS and IP Relay users, and if so, what those proxy numbers should be.

The record is clear that the Commission should use 10-digit NANP numbers as the proxy numbers. This is a necessary first step to minimize unnecessary distinctions between hearing and disabled individuals, and put VRS and IP Relay users on equal footing with their hearing counterparts. The fact is, *all* consumers should have the ability to be reached via the industry-wide numbering scheme — NANP numbers — which, as the record shows, can be achieved with minimal burden to consumers and providers.<sup>1</sup>

Most providers agree with AT&T that relay users should have the ability to obtain NANP numbers through their designated relay provider.<sup>2</sup> As AT&T explained in its comments, VRS providers can easily obtain such numbers from voice service providers in the same manner as Voice over Internet Protocol (“VoIP”) providers do today, and then provide such numbers to relay users at a low price (generally \$1 or less per line per month). Additionally, commenters generally agree that VRS and IP Relay users should have the ability to port their numbers. As the Commission has previously determined, number portability is beneficial to *all* end users. Equally important, it facilitates competition among providers in the relay marketplace. The Commission accordingly

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<sup>1</sup> Dash Comments at 8.

<sup>2</sup> GoAmerica Comments at 9; Sorenson Comments at 4.

should act to ensure that relay providers and the providers from whom they obtain NANP numbers facilitate the porting process, consistent with the Commission's existing porting rules.

**2. All VRS providers must have direct access to end user IP addresses to complete calls.**

The IP address is essential to reach a VRS customer. No other piece of information, including the URI, will enable a VRS provider to complete a call to a VRS user. Thus, whatever proposal the Commission adopts, it must ensure that VRS providers can access that information. So the question then becomes what is the best method of providing such access.

The record clearly demonstrates that there are multiple ways to provide relay providers access to the IP address. They can access the information through (1) the user's designated provider, which Sorenson and NeuStar propose, (2) a public dynamic domain name system ("DDNS") accessible by all (providers, users, public at large), or (3) a shared DDNS accessible only by VRS providers. While all these proposals could work, as AT&T explains below, the last proposal is the best option because it is more efficient and does not raise the administrative, privacy, security, or anticompetitive concerns raised by the alternative proposals.

First, dynamic domain name systems already exist. Multiple VoIP providers maintain such systems today to track updates to IP address changes for their users. Thus, if adopted, the Commission could in short order – within six months – approve the use of

a DDNS vendor to maintain a national dynamic database of IP addresses for relay users.<sup>3</sup> Dash Carrier Services, for example, is one such entity that has stated that it could implement a national DDNS, populated by VRS providers, within a 60-day timeframe.

By contrast, the NeuStar proposal could not be immediately implemented. While NeuStar conceivably could make the necessary modifications to the NPAC database on its end within six months,<sup>4</sup> as it claims, those changes alone are not sufficient to provide VRS providers access to IP addresses. The carriers that populate the NPAC database would *also* have to make changes to their systems in order to route relay users' URI information to the NPAC database. Said another way, VRS providers cannot populate or update the NPAC database directly, but rather must rely on carriers to do so. NeuStar cannot guarantee that all carriers would be able to make the necessary changes to their systems within the 6-month timeline.

Second, the DDNS proposal allows relay providers the most efficient and expedient access to IP addresses. Once the VRS or IP Relay provider receives the call (whether the provider is the called party's designated provider or not), the Communications Assistant ("CA") would be able to immediately access the DDNS database, retrieve the associated IP address, and complete the call to the relay user. The NeuStar and Sorenson proposals, alternatively, require the CA to go through the

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<sup>3</sup> As AT&T explained in its comments, end users could continue to use existing software and equipment provided by their designated VRS provider to update their IP address and their provider in turn could update the national DDNS database in real time, with minimal cost.

<sup>4</sup> Notably, all changes to the NPAC database must be approved by an eight-member LLC organization comprised of telecommunications carriers (including AT&T, Comcast, Qwest, Frontier, Sprint Nextel, Embarq, Verizon and T-Mobile). While such approval could be obtained within six months, NeuStar cannot guarantee such approval nor can it guarantee that the required changes to the NPAC database would be prioritized over other database changes that have already been approved but not yet implemented. See Attachment 1, which details other concerns with using the NPAC database.

designated provider to retrieve the IP address. The NeuStar proposal is particularly troublesome because ultimately the CA would have to query a domain name system to retrieve the end user's IP address. However, instead of querying a database directly populated by all VRS providers, the CA would have to query a database populated by the NPAC database. There simply is no technical or operational basis for inserting the NPAC database or any private VRS provider's database in the process, particularly when options exist that would allow all VRS providers to obtain that information directly.

Third, the DDNS proposal minimizes the potential for an end user's designated relay provider to engage in anticompetitive practices. If VRS providers have to contact the designated provider for an end user's IP address, that provider will have the ability and possibly the incentive to monitor the customer's calling patterns, which could lead to unfair marketing opportunities, or delays in the provisioning of the IP address. The DDNS proposal puts all VRS providers on equal footing by giving them *direct*, equal access to the IP addresses of all VRS users, thus minimizing the opportunity for providers to engage in anticompetitive marketing or provisioning practices.

Finally, the shared DDNS database would only be accessible by VRS providers. A publicly accessible database would open VRS users to a number of consumer harms, including prank calls, privacy invasion, and fraud.<sup>5</sup> There simply is no reason for public access to this database (and it would be difficult to restrict access to just legitimate VRS users), when the purpose of the database is to allow relay providers the ability to complete calls for VRS users.

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<sup>5</sup> For example, hackers would have the ability to access the database to determine IP addresses and then use them for spamming purposes or for other attacks on users' computers.

**3. E911 implementation for VRS and IP Relay users cannot occur until other numbering issues are resolved.**

All commenters support relay users having access to emergency 911, and generally support the VoIP model recently adopted by the Commission. However, before E911 can be implemented for VRS and IP Relay users, the Commission must first resolve many of the key issues identified here. Specifically, it must assign NANP numbers to VRS and IP Relay users and then implement a process to map those numbers to the users' IP address (such as the DDNS database). Notably, inserting a numbering administrator in the process, as suggested by ONS, would add significant time to the implementation of a VRS and IP Relay numbering plan, which would delay deployment of the E11 solution.

**4. AT&T generally supports the principles articulated by the Consumer Groups.**

Consumer group commenters asked relay providers to address a number of key principles. AT&T generally supports the articulated principles, including ensuring customer privacy, equipment interoperability, number portability, location and number registration, E911 implementation and prioritization, and network security. In fact, AT&T's proposal — use of NANP numbers and a shared, DDNS database — is fully consistent with these principles.

The one principle AT&T does not support is the use of a third party administrator for the distribution of NANP numbers. As AT&T detailed in its comments in this proceeding, relay providers can easily purchase NANP numbers from the same wholesalers as VoIP providers, and then make them available to requesting VRS users. This process has worked well for VoIP services without impeding competition and is

equally appropriate in the relay context. A third party administrator would add unnecessary oversight, costs and burdens to the process, without any measurable benefit.

### **CONCLUSION**

For the foregoing reasons, AT&T requests that the Commission consider the key principles explained herein.

Respectfully Submitted,

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## ATTACHMENT 1

### Problems with the NPAC Database for VRS and IP Relay Attachment 1

NeuStar's Proposal, use of the NPAC database, is the wrong approach to build a bridge for relay users between the Internet and the telephone numbering system. This is true for the following reasons:

1. **Conflicting Goals** - The NPAC is only one of several databases NeuStar manages related to the North American Numbering Plan (NANP). Besides the NPAC, which was first delivered in 1997 for number portability purposes, NeuStar also has developed databases in support of FCC contracts it holds as the North American Numbering Plan Administrator (NANPA) and the Number Pooling Administrator (PA). As its website displays,<sup>6</sup> it also provides functions such as "Managed DNS", "mobile "Next Generation Messaging", wireless "Common Short Codes", as well as "SIP IX." Each of these functions has underlying databases that have as a main component either or both of the main data elements expected to reside in the IP Relay database: telephone numbers and Internet addresses (or URI's).

While the NPAC database can be enhanced to add a field that links with existing fields in the database, the NPAC database is already used for a myriad of purposes related to telephone numbers, including number portability, SS7 gateway Destination Point Codes, LIDB and CNAM network designations, and information necessary to identify the reseller associated with a telephone number. In using the NPAC database for IP addresses, the deaf community would have to compete with carriers primarily concerned with hearing individuals and database features necessary to route hearing customer calls through the PSTN.

2. **Vendor Management** – Before going further with discussions on using NPAC, the deaf community should ask if it wants its database priorities mingled with those of 1,765 NPAC Users. There are ILECs, CLECs, VoIP providers, Wireless carriers, and LNP database service bureaus interfacing with NPAC today as calls must use routing information to complete voice calls domestically and in Canada. Of these providers, Sprint Nextel, Verizon and AT&T are the only commenters to this FCC proceeding, but the priorities of the rest of these NPAC Users drive NeuStar's management of this database.

Additionally, the North American Portability Management ("NAPM") Limited Liability Corporation ("LLC") manages the vendor relationship with NeuStar as the NPAC administrator. Any changes to the database itself must be approved by the eight companies that are currently members of this LLC. Those companies are AT&T, Comcast, Embarq, Frontier, Qwest, Sprint Nextel, T-Mobile, and Verizon. The LLC charter requires LLC members to be telecommunications

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<sup>6</sup> [www.NeuStar.biz](http://www.NeuStar.biz)

carriers or have plans to become carriers within six months. Consequently, relay providers *may* join the LLC if they meet this and other conditions. Most votes are decided by the majority, but some require a super-majority count.

It may well be the preference of the deaf community and its providers to form its own LLC to create a database and manage it according to its constituency's priorities. The FCC is well aware of the LLC use for LNP as well as ENUM applications.

3. Change Control – Notwithstanding NeuStar's assertion that, within 14 days after majority approval by the NAPM LLC, it could insert the URI field in the NPAC database, the most recent representations by NeuStar indicate that there will need to be some database adjustments to Change Order 415 to enable this feature. The parties that currently are members<sup>7</sup> of the North American Numbering Council (NANC) Local Number Portability Administration Working Group (LNPA WG) are the technical representatives through whose hands any NPAC enhancement must first pass. Since the CO 415 must be reconsidered by this group, it will find itself in competition with other current Change Orders, and subject to the priorities of this group's agenda. The LNPA WG meets face-to-face generally every other month. They report regularly to the NANC which meets approximately five times per year.

The extent to which the NPAC can be used for the purposes of this Internet-to-telephone number database given the above constraints should be closely considered before accepting this approach. AT&T suggests that a database freshly created for the purposes of relay services is the path of least resistance.

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<sup>7</sup> Alltel; ARB Consulting; AT&T; AT&T Mobility (Cingular); ATIS; Bell Mobility; California Public Utilities Commission; Canadian LNP Consortium; Cavalier Telephone; Centennial Wireless; Cincinnati Bell Telephone; Comcast; Cox Communications; Cricket Communications; DayStar Communications; EMBARQ; Evolving Systems; Global Crossing; GVNW; Integra Telecom; Iowa Network Services; NARUC; NENA; NeuStar, Inc.; NeuStar, Inc. Pooling; NRT; Oklahoma Corporation Commission; One Communications; OnStar; Qwest; Rural Cellular Corp.; Southern LINC; Sprint – Nextel; SoutherLINC Wireless; SunCom Wireless; Syniverse Technologies; Tekelec; Telcordia Technologies; Time Warner Cable; T-Mobile; VeriSign; Verizon; Verizon Wireless; Vonage; Wisor OSS Solutions. Source: LNPA WORKING GROUP Distribution Sheet 05-07-07